We Claim:

1. A method of immunologically measuring the human medullasin content in blood characterized by comprising the following steps (a) and (b):

(a) a step of breaking up the leukocytes in a blood sample by contacting said blood sample with the following aqueous liquids (i) or (ii) or an aqueous liquid mixture of (i) and (ii)

(i) an aqueous liquid having an osmotic pressure of 250mOsm/kg · H_2O or less or an aqueous liquid having an osmotic pressure of 310mOsm/kg · H_2O or more;

(ii) an aqueous liquid comprising a hemolysate; and

(b) immunologically determining the amount of human medullasin released into said blood sample from the leukocytes broken up in said step (a) using an anti-human medullasin antibody.

2. The method of immunologically measuring the human medullasin content in blood according to claim 1, wherein said aqueous liquid (i) is a buffer solution and/or distilled water that may include a water-soluble organic solvent.

3. The method of immunologically measuring the human medullasin content in blood according to claim 1, wherein said aqueous liquid (i) is an aqueous solution containing a water-soluble substance selected from the group consisting of inorganic acid salts, organic acid salts, sugars, sugar alcohols, amino acids and protein substances.

4. The method of immunologically measuring the human medullasin content in blood according to ~~claim~~ 1, wherein the amount of said aqueous liquid (i) used is 50 to 100000 times that of the blood sample in terms of volume units.

5. The method of immunologically measuring the human medullasin content in blood according to claim 1 wherein said aqueous liquid (ii) is an aqueous solution of a surfactant.

6. The method of immunologically measuring the human medullasin content in blood according to claim 5, wherein said aqueous liquid (ii) is an aqueous solution of at least one type of hemolysate selected from the group consisting of higher fatty acid salts, alkylaryl sulphonates, alkyl sulphonates, alkyl sulphate ester salts, alkyl pyridinium salts, alkyltrimethyl ammonium salts, polyoxyethylene alkylphenyl ethers, polyoxyethylenealkylethers, polyoxyethylene sorbitan fatty acid esters and alkyl betaines.

7. The method of immunologically measuring the human medullasin content in blood according to claim 1 wherein the amount of aqueous liquid (ii) used is 50 times to 100000 times that of the blood sample in terms of volume units.

8. The method of immunologically measuring the human medullasin content in blood according to claim 1 wherein said step (b) of immunologically determining the content of human medullasin in said blood sample comprises contacting the blood sample containing said human medullasin released from the leukocytes broken up in said step (a) with an anti-human medullasin antibody immobilized to an insoluble carrier in the presence of a labelled anti-human medullasin antibody to form a sandwich complex and to captur the human medullasin on a labelled immuno complex by an antigen-antibody reaction, and then determining the amount of activity of the label material in said complex.

9. The method of immunologically measuring the human medullasin content in blood according to claim 1 wherein said step (b) comprises

sandwiching said human medullasin in said blood sample between an anti-human medullasin antibody immobilized to an insoluble carrier and a labelled anti-human medullasin antibody to form complex by an antigen-antibody reaction, and determining the amount of label in said complex.

10. The method of immunologically measuring the human medullasin content in blood according to claim 8 wherein at least one of said anti-human medullasin antibodies is an anti-human medullasin monoclonal antibody.

11. A method of diagnosing multiple sclerosis characterized by including the following steps (a), (b) and (c);

(a) a step of breaking up the leukocytes in a blood sample by contacting said blood sample with the following aqueous liquids (i) or (ii) or an aqueous liquid mixture of (i) and (ii)

(i) an aqueous liquid having an osmotic pressure of 250mOsm/kg · H_2O or less or an aqueous liquid having an osmotic pressure of 310mOsm/kg · H_2O or more;

(ii) an aqueous liquid comprising an hemolysate;

(b) immunologically determining the amount of human medullasin released into said blood sample from the leukocytes broken up in said step (a) using an anti-human medullasin antibody; and

(c) observing the size of and/or changes in the human medullasin content in the blood obtained in said step (b).

12. The method of diagnosing multiple sclerosis according to claim 11 wherein at least one of said anti-human medullasin antibodies is an anti-human medullasin monoclonal antibody.

13. The method of diagnosing multiple sclerosis according to claim 11,

wherein said aqueous liquid (i) is a buffer solution and/or distilled water that may include a water-soluble organic solvent.

14. The method of diagnosing multiple sclerosis according to claim 11 wherein the amount of said aqueous liquid (i) used is 50 to 100000 times that of the blood sample in terms of volume units.

15. The method of diagnosing multiple sclerosis according to claim 11 wherein said aqueous liquid (ii) is an aqueous solution of a surfactant.

16. The method of diagnosing multiple sclerosis according to claim 11 wherein the amount of aqueous liquid (ii) used is 50 times to 100000 times that of the blood sample in terms of volume units.

17. The method of diagnosing multiple sclerosis according to claim 11 wherein said step (b) of immunologically determining the content of human medullasin in said blood sample comprises contacting the blood sample containing said human medullasin released from the leukocytes broken up in said step (a) with an anti-human medullasin antibody immobidized to an insoluble carrier in the presence of a labelled anti-human medullasin antibody to form a sandwich complex and to capture the human medullasin on a labelled immune complex by an antigen-antibody reaction, and then determining the amount of label in said complex.

18. The method of immunologically measuring the human medullasin content in blood according to claim 11 wherein said step (b) comprises sandwiching said human medullasin in said blood sample between an anti-human medullasin antibody immobilized to an insoluble carrier and a labelled anti-human medullasin antibody to form complex by an antigen-antibody reaction, and determining the amount of label in said complex.